

1 INTRODUCTION

This System/Software Requirements Specification (SRS) defines the requirements for the uniform National Aeronautics and Space Administration (NASA) Personnel/Payroll System (NPPS).

1.1 IDENTIFICATION

The SRS is an extension of the Functional Requirements Document (FRD). The SRS specifies in detail the NPPS functional, performance, interface, data, and quality requirements.

The SRS is the detailed definition of the requirements which shall be satisfied through the implementation of the system. This document is identified as the NPPS System/Software Requirements Specification, AIM-NPPS-DID-15.

1.2 PURPOSE

The SRS defines the specific requirements to enable the NPPS development team to design, build, implement, and test the NPPS. This document details the technical requirements to be implemented by the software system, enabling an assessment of the completed system's compliance with the requirements as stated herein.

1.3 SCOPE

This version of the SRS contains updates that reflect the current release of the NPPS.

2 SYSTEM OVERVIEW

The NPPS is a uniform system to be used by all NASA installations. The system will assist the installations in administering employee personnel and payroll processing and record keeping activities. The system user will be able to accomplish data entry for required personnel action processing, view employee records, process payrolls, select online, and schedule hardcopy reports.

The NPPS will be developed as an agencywide software application to satisfy a core set of software requirements meeting the processing needs of all NASA installations. Each NASA installation may develop additional applications to interface with the NPPS database to satisfy specific processing needs of the installation. This section provides an overview of the NPPS system requirements as identified by the NPPS Interinstallation Project Users Committee (IPUC).

NPPS is a sensitive data processing application requiring special attention to system and data access. The user will be able to gain access to employee data through NPPS security. NPPS security will be provided at the transaction/screen level for each user. The user will be authorized to view system data and will be separately authorized to update the data by a system administrator or authorized system user through the security administration function provided by NPPS.

The diversity of the NPPS users requires that a system navigation method be provided to satisfy both the beginning and expert system user. NPPS menus will provide one means of system navigation to the specific processing screens desired by the beginning system user. An "expert mode" will provide an optional means of screen navigation for the more experienced system user to select a desired process and by-pass intermediate menu processing.

The diversity of the system user and the complex structure of NPPS requires that assistance be available to system users at all times. Help will be available online to system users from any NPPS process. NPPS users will be authorized through the security administration function to maintain the help information at the installation.

The volume of input and output data required to be processed by NPPS necessitates that NPPS provides a method of processing bulk input and output. The system will provide online and batch access to the system database containing personnel and payroll data.

The online system will be composed of three primary segments. The personnel segment of the system will contain all the processing components required to add, maintain, and delete personnel in the system. The payroll segment of the system will contain all the processing components required to process pay for active personnel. The application administration segment of the system will contain the functions required to authorize system users to access system

components, maintain system table values, update help information, and other miscellaneous functions requiring controlled user access.

Batch processes will accommodate hardcopy output reports and input of large volumes of data to be processed by NPPS. The core report formats are defined and included in Appendix G, Core Reports.

Standard external interfaces to other government agency systems must be accommodated in NPPS. Standard interface file formats defined by these agencies must be used for all data transfer between the agencies. NPPS will provide output and input interface file formats for each standard interface application. Access to the NPPS database in read-only mode for center-unique applications will be provided in the system through the use of standard ADABAS and NATURAL programs developed by each installation. NPPS will provide a method to exit a NPPS process, execute an installation-unique application, and return to NPPS for further processing.

2.1 USER SYSTEM DEFINITIONS

The NPPS is a uniform system to be used by personnel and payroll employees at all NASA installations. The system user will be able to accomplish data entry for required personnel action processing, to view employee records, process payrolls, select online, and schedule hardcopy reports.

The NPPS will be developed as an agencywide software application to satisfy a "core" set of software requirements meeting the common processing needs of all NASA installations. Each NASA installation may develop additional applications to interface with the NPPS database to satisfy specific processing needs of the installation. Paragraph 2.2 provides an overview of the NPPS requirements as identified by the NPPS IPUC.

2.2 USER SCENARIOS

Figures 2.2-1 through 2.2-10 depict an operational overview of NPPS. The view is divided into three major processes.

- Annual Processes
- Personnel Processes
- Biweekly Pay Processes

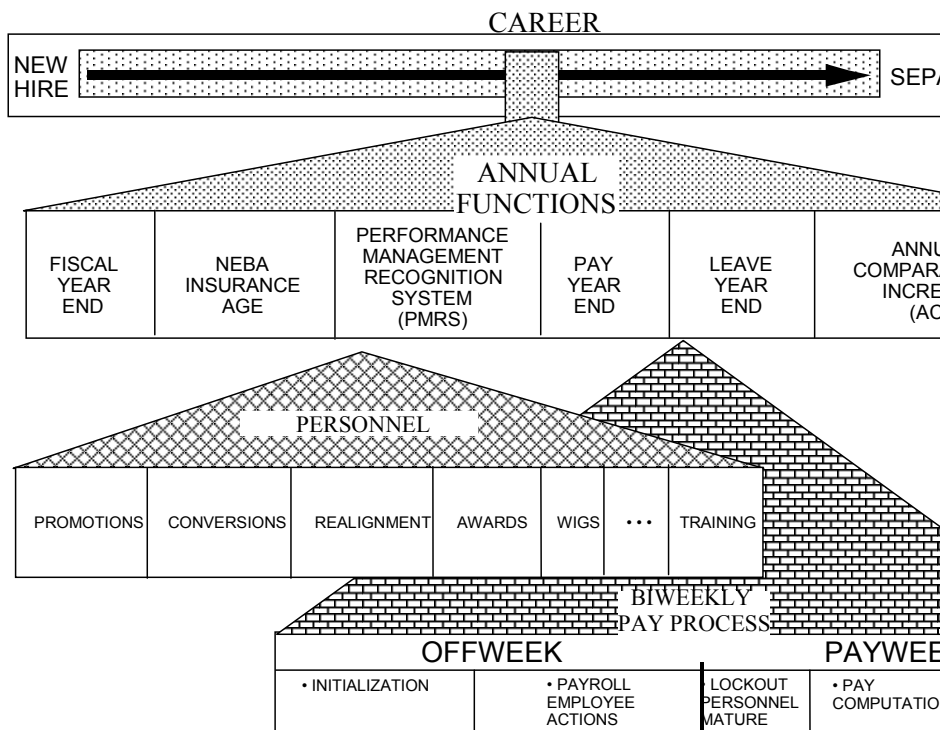


Figure 2.2-1 OPERATIONAL OVERVIEW

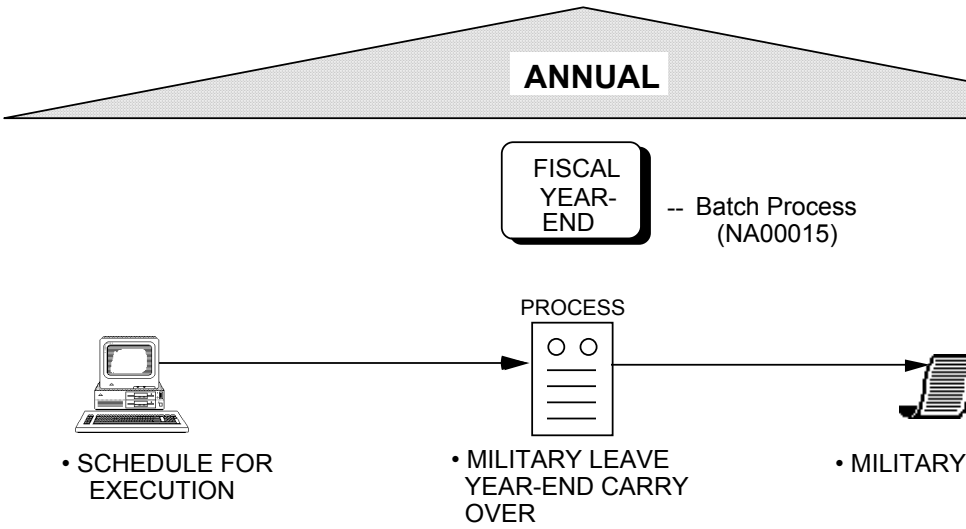


Figure 2.2-2 ANNUAL FISCAL YEAR-END PROCESS

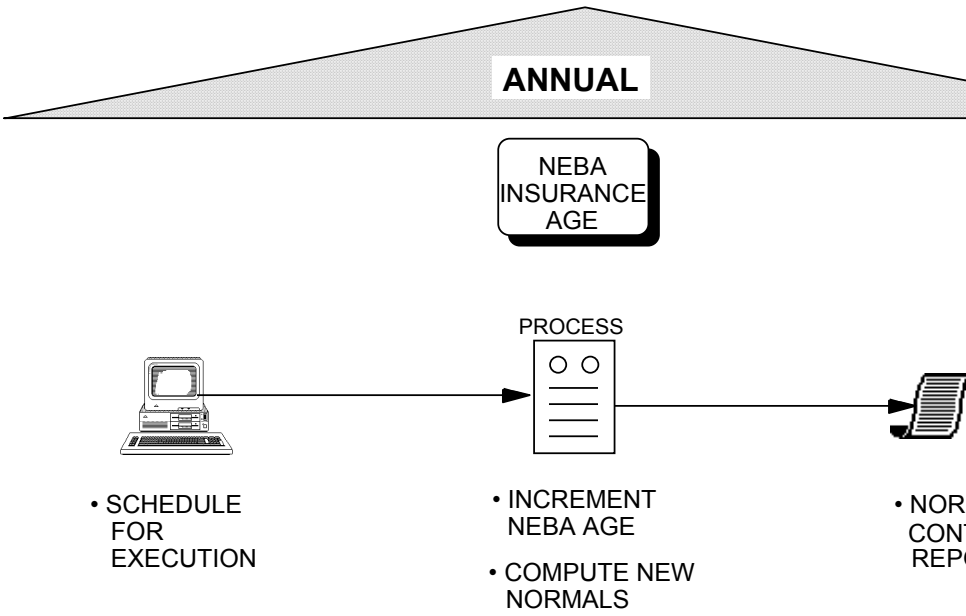


Figure 2.2-3 ANNUAL NEBA INSURANCE AGE PROCESS

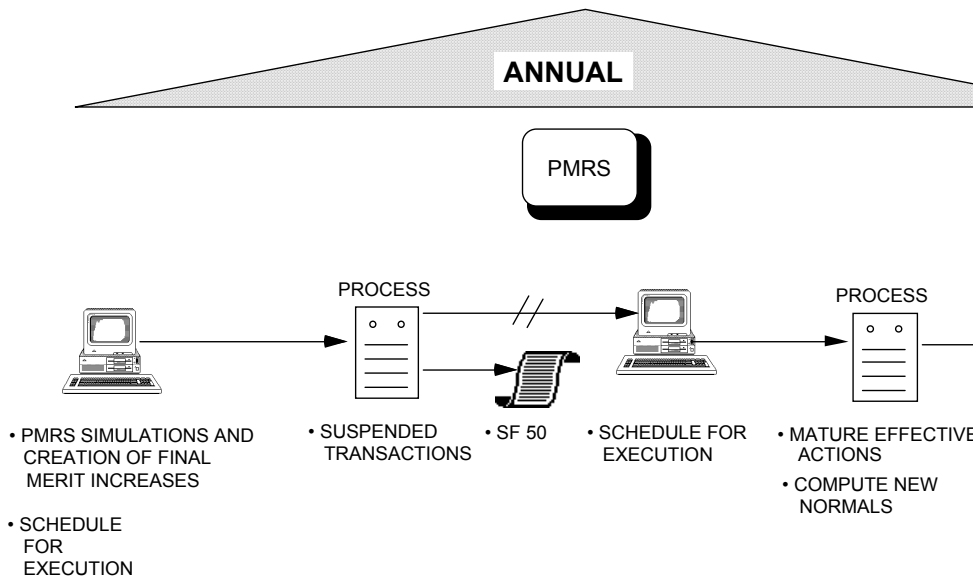


Figure 2.2-4 ANNUAL PMRS PROCESS

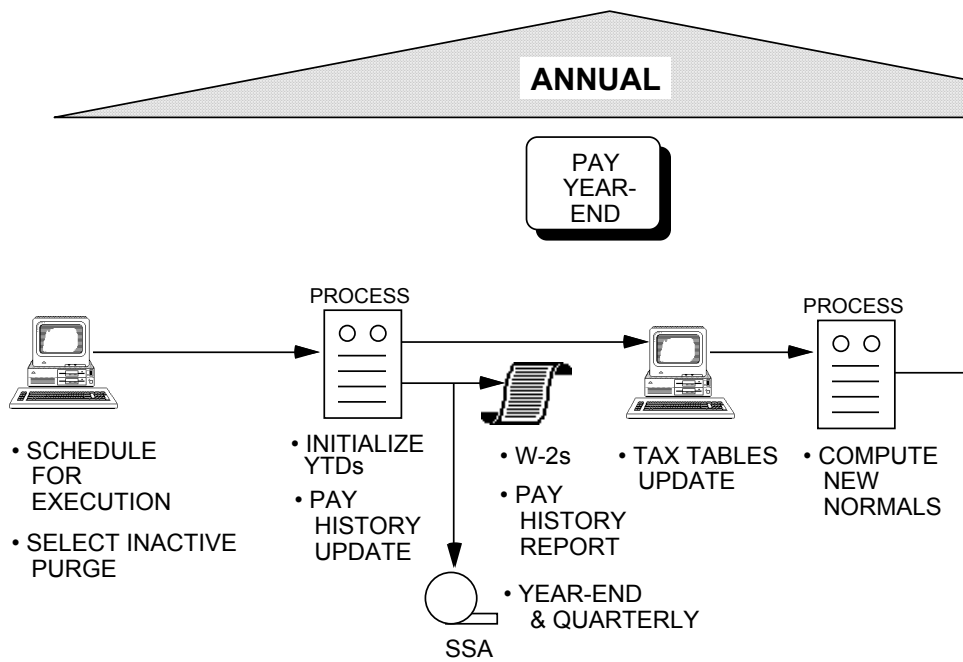


Figure 2.2-5 ANNUAL PAY YEAR-END PROCESS

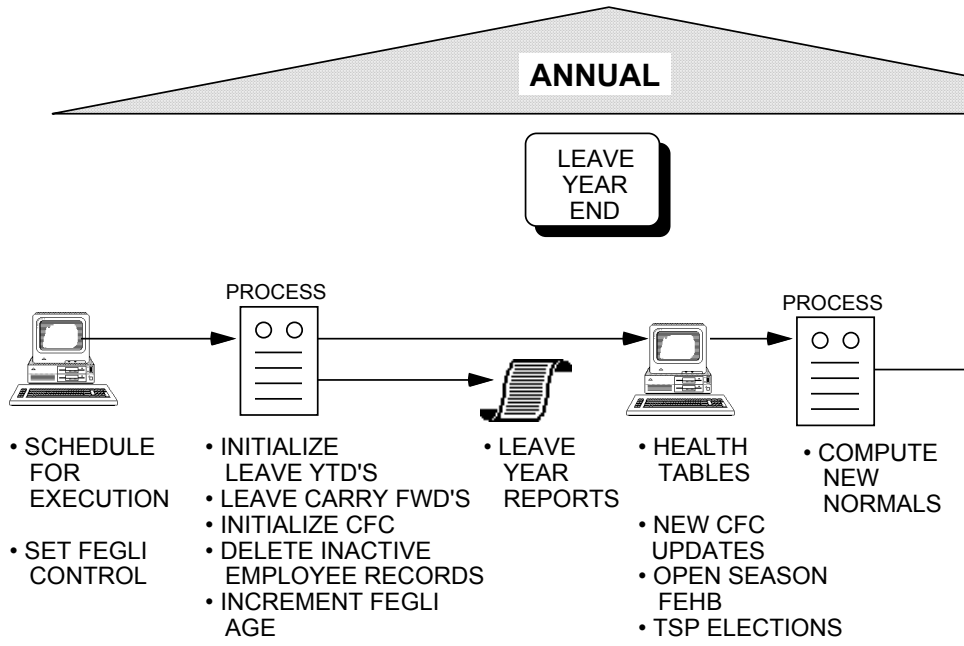


Figure 2.2-6 ANNUAL LEAVE YEAR-END PROCESS

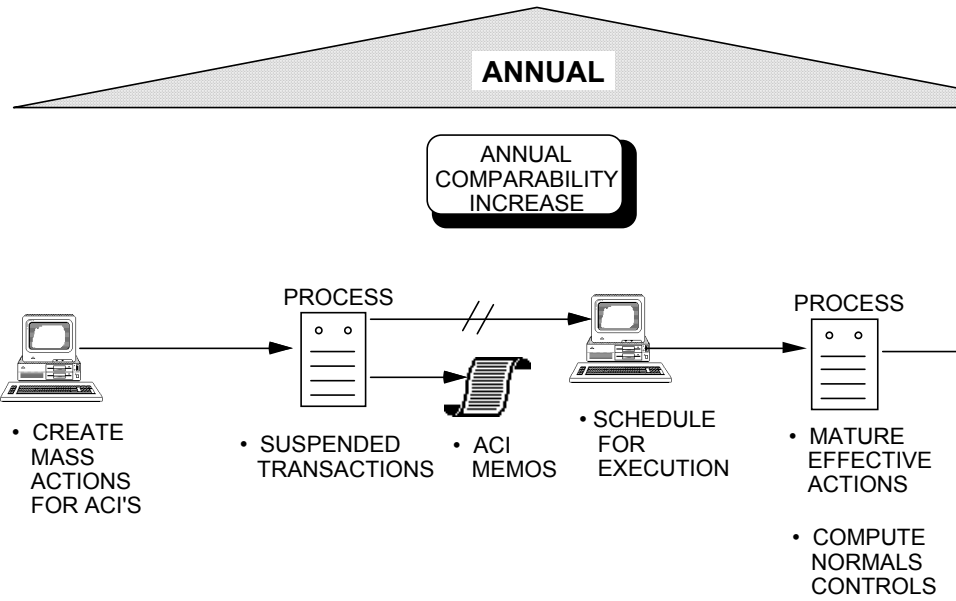


Figure 2.2-7 ANNUAL ACI PROCESSING

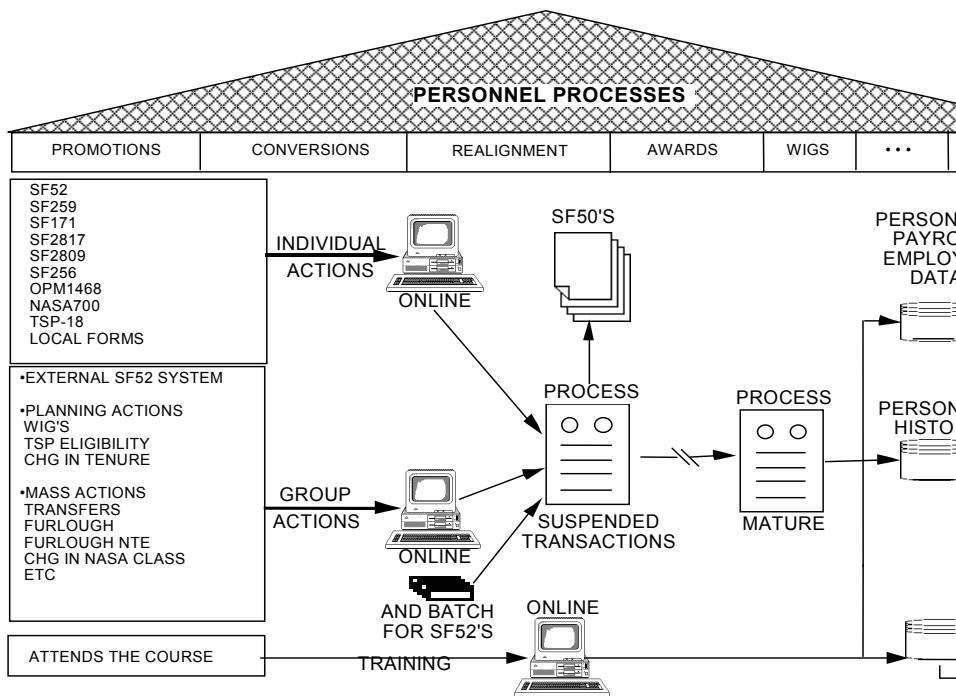


Figure 2.2.8 PERSONNEL PROCESSES

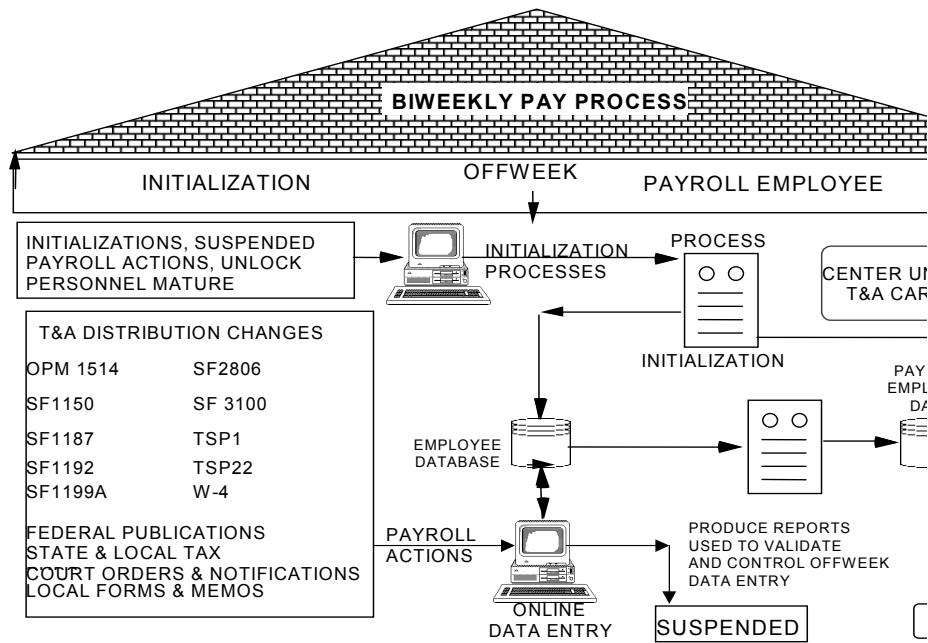


Figure 2.2-9 BIWEEKLY PAY PROCESS – OVERVIEW

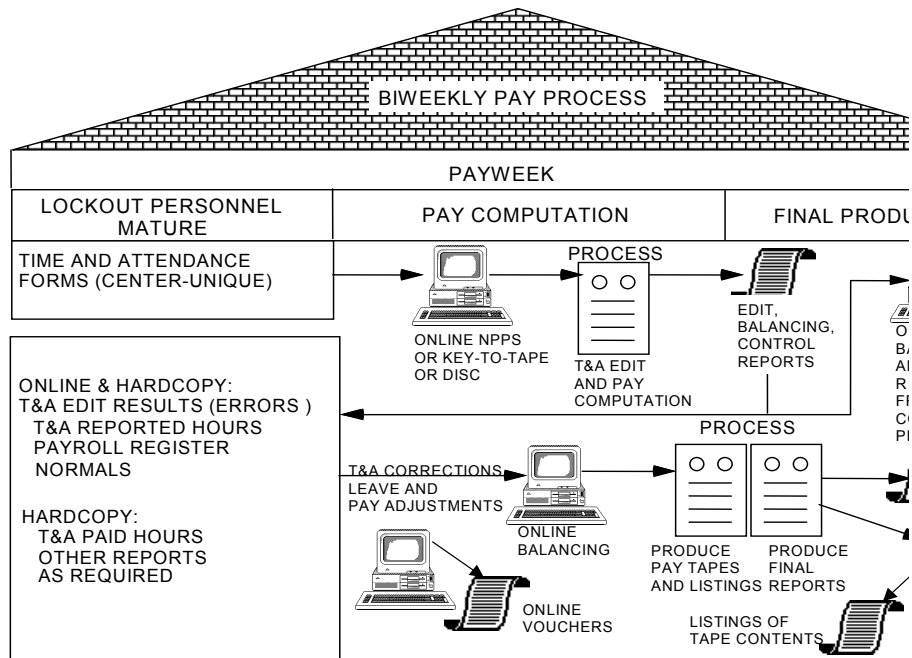


Figure 2.2-10 BIWEEKLY PAY PROCESS – PAYWEEK

2.3 USER SYSTEM OBJECTIVES

Following are the user objectives for the NPPS.

- Integrated database for both personnel and payroll activities
- Audit trail capabilities for all database updates
- Standard report generation for a defined set of core reports
- Online query and ad hoc report generation
- Full access to employee historical data (personnel actions and pay/leave history)
- External interfaces with NASA Headquarters (HQ), US Department of Treasury, Social Security Administration (SSA), US Department of Agriculture (USDA) National Finance Center and CAPPs.
- Simplified user exit and return for installation-unique processing
- Capability to suspend and later mature personnel and payroll actions
- Capability to simulate and process the merit increase for employees covered by the Performance Management Recognition System (PMRS)
- Common access and security methodology
- Parameter-driven generation of Notification of Personnel Actions (SF 50s)
- Parameter-driven generation of Request for Personnel Actions (SF 52s)
- Capability to apply global transactions
- Table driven input validation and deductions calculations
- Data validation in accordance with Office of Personnel Management (OPM) Instructions
- Fully supporting and integrated help screens
- Explicit, unambiguous error and informative messages
- Database backup and recovery